

STATEMENT BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OF SEDIMENT MANAGEMENT STANDARDS AND THE EAST WATERWAY OPERABLE UNIT AS DISCUSSED ON MAY 29, 2019 WITH THE PORT OF SEATTLE, CITY OF SEATTLE, AND KING COUNTY

FRAMEWORK

The Sediment Management Standards (SMS) in Washington State prescribe a method for deriving numerical criteria as the sediment cleanup levels (CULs) for chemicals of concern (COCs). SMS may also be used to establish remedial action levels (RALs) which provide the basis for defining the areas of a site that require active cleanup. Preliminary remediation goals (PRGs) are developed during the process that leads to a remedy decision and become the CULs when a remedial action is selected in a Record of Decision (ROD). In some instances, the RALs are equal to the PRGs or CULs, but in other instances the RALs may be higher than the CULs. When the RALs are higher than CULs, monitored or enhanced natural recovery (MNR or ENR) is often the mechanism by which the sediments attain the CULs.

The most stringent CULs under SMS are referred to as the Sediment Cleanup Objective (SCO), and for COCs the SCO is the highest of: (1) natural background; (2) the practical quantification limit (PQL); and (3) the risk-based concentration. If achieving the SCO is technically impossible or doing so would result in a net adverse environmental impact, SMS provides that the CULs may be adjusted upward to as high as the Cleanup Screening Level (CSL). For COCs the CSL is the highest of: (1) regional background; (2) the PQL; and (3) the risk-based concentration.

The sediment cleanup provisions of SMS are applicable or relevant and appropriate requirements (ARARs) under CERCLA. This means that a sediment cleanup in Washington State conducted under CERCLA must attain the SMS-derived CULs at the completion of the remedial action. In circumstances where there is adequate justification for doing so, CERCLA also allows for a waiver of the SMS requirements. Since a waiver would eliminate the SMS-derived CULs for both the SCO and the CSL, along with any such waiver there would need to be a determination of the alternative CULs for COCs.

EAST WATERWAY OPERABLE UNIT

For the East Waterway Operable Unit (EWOU) of the Harbor Island Superfund Site, the PRGs and anticipated CULs are currently based on the SCO which for PCBs is the natural background level of 2 ppb, as prescribed by SMS. This is the level of PCBs in sediments that must be attained at the completion of the remedial action. The RAL for PCBs in the sediments of the EWOU is likely to be set at 192 ppb based on the SMS-numerical criteria for preventing benthic toxicity. This is the level of PCBs in sediments that would dictate the areas of active cleanup in the EWOU. Following active cleanup, the remedial action will continue with a combination of ENR and source control. Once these steps are complete, it is presently expected that the remedial action will achieve the SCO of 2 ppb for PCBs.

There is modeling which suggests that the SCO for PCBs may not be achieved at the completion of the remedial action. If the modeling turns out to be correct, the CUL that is established at the SCO could be adjusted upward to as high as the CSL which would be based on a regional background level. In the alternative, if it is not technically possible to achieve the CSL or doing so would result in a net adverse environmental impact, or if there is no regional background level established for PCBs, there would be a basis for a waiver of the SMS requirements.

Source control is ongoing in the watershed above the EWOU but until the source control work is at or near completion, it will not be possible to calculate a regional background level for PCBs. Absent that level, adjusting the SCO to the CSL would not effectively raise the CUL for PCBs. Additionally, although modeling suggests it may not be possible to achieve the natural background level, there is insufficient information to demonstrate with certainty that the SCO will be technically impossible to achieve at the completion of the remedial action. Absent that demonstration, there is no justification under SMS for raising the CUL to the CSL for PCBs. Similarly, there is insufficient justification for a waiver of the SMS ARAR. It is worth noting that even if there were presently a basis for a waiver of SMS, which there is not, the time it would take to develop an alternative cleanup level for PCBs would extensively delay a remedial action decision and cleanup for the EWOU.

If a regional background level for PCBs in the EWOU area is developed or approved by EPA, and if EPA determines based on monitoring data that it is not technically possible to meet the SCO-based cleanup level, the SMS ARAR could be achieved by adjusting the cleanup level upward to the CSL using the regional background level. Alternatively, if the SMS ARAR, including the SCO and CSL, cannot be achieved following cleanup, source control, ENR and long-term monitoring, there would then be a basis for a waiver of these SMS requirements. At that point, it is anticipated that there would also have been enough time to develop alternative CULs.